

REMARKS

Claims 1, 2, 5, 7 and 9-25 are pending. Claims 3, 4 and 6 have been canceled. Claims 11-24 are withdrawn from consideration.

Claim 1 has been amended to delete the description of the water soluble auxiliary component (B).

New claim 25 finds support at page 17, lines 12-13 of the present specification.

No new matter has been added by way of the above-amendment.

Interview Request

Applicants respectfully request an Interview with the Examiner to discuss a proper experimental design to show that Shigemori et al. (U.S. 2003/0049559) does not have an enabling disclosure for the portion of Shigemori et al. which the Examiner relies upon in finding the presently claimed invention anticipated. On this matter, MPEP 2121.01 states:

"In determining that quantum of prior art disclosure which is necessary to declare an applicant's invention 'not novel' or 'anticipated' within section 102, the stated test is whether a reference contains an 'enabling disclosure'... ." *In re Hoeksema*, 399 F.2d 269, 158 USPQ 596 (CCPA 1968). The disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient, if it cannot be produced without undue experimentation. *Elan Pharm., Inc. v. *->Mayo Found. For Med. Educ. & Research<*, 346 F.3d 1051, 1054, 68 USPQ2d 1373, 1376 (Fed. Cir. 2003).

The Examiner is requested to contact Applicants' representative, Garth M. Dahlen, Ph.D., Esq. (#43,575) at 703-205-8030 upon reading this document in the event that Dr. Dahlen has not already contacted the Examiner to set up the Interview.

Issues under 35 U.S.C. § 102

Claims 1-7 and 9-10 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Shigemori et al. Applicants respectfully traverse the rejection.

Inventive claim 1 contains the following features:

A particle having a core-shell structure which comprises

- i) a meltable organic solid component (A) comprising a plurality of organic solid materials each having a different affinity relative to a water-soluble auxiliary component (B),
wherein (A) comprises:
 - a) a hydrophobic polymer (A1), and
 - b) a hydrophilic polymer (A2) having at least one hydrophilic group selected from the group consisting of a hydroxyl group, a carboxyl group, an amino group, an imino group, an ether group, an oxyalkylene group, an ester group and an amide group,
wherein at least one of the hydrophobic polymer (A1) and the hydrophilic polymer (A2) is a condensation-series thermoplastic resin
- ii) wherein the core (of the core-shell structure) contains the hydrophobic polymer (A1), and
- iii) wherein the shell (of the core-shell structure) contains the hydrophilic polymer (A2).

Applicants respectfully submit that Shigemori et al. do not anticipate the presently claimed invention, since Shigemori et al. do not provide an enabling disclosure to the artisan to prepare particles having a core/shell-structured particle which substantially comprises a condensation-series thermoplastic resin. A patent claim "cannot be anticipated by a prior art reference if the allegedly anticipatory disclosures cited as prior art are not enabled." *Elan*

Pharm., Inc. v. Mayo Found. for Med. Educ. & Research, 346 F.3d 1051, 1054, 68 USPQ2d 1373 (Fed. Cir. 2003).

Applicants note that Shigemori discloses thermoplastic resins as binder resins. However, the species of the disclosed thermoplastic resins are conventional thermoplastic resins used in toners. Shigemori also discloses condensation-series thermoplastic resin such as a polyester or polyamide, as an example of the binder resins. These particles of Shigemori are substantially prepared by a seed polymerization which requires a bead polymerization or emulsion polymerization. For example, Shigemori discloses that as a method for obtaining the core-shell type colored particles, an *in-situ* polymerization method can be adopted ([0035]). Shigemori also discloses in the Examples as follows:

"polymerizable monomer composition for a core was added to said dispersion liquid of the magnesium hydroxide colloid and agitated . . . To the resultant mixture, added was . . . t-butyl peroxy-2-ethylhexanoate . . . as a polymerization initiator to obtain a mixture. . . thus-prepared dispersion liquid of the obtained monomer mixture was provided into a reactor . . . , heated . . . to allow it to be polymerized. . . to a vessel containing the resultant polymerized mixture, provided was a mixture obtained by dissolving 0.3 part of 2,2'-azobis(2-methyl-N-(2-hydroxyethyl)-propionamide) . . . as a water-soluble polymerization initiator in an aqueous dispersion liquid of said polymerizable monomer for a shell. The mixture in the vessel was agitated to allow said polymerizable monomer for a shell to be polymerized continuously for 4 hours and, then, the reaction was terminated to obtain a dispersion liquid A of unrefined colored particles." ([0154])

As the Examiner is aware, it is essential to eliminate water formed by a condensation reaction or polymerization of monomer components of the condensation-series thermoplastic binder resin for proceeding the condensation reaction. That is, a condensation reaction (polymerization) cannot proceed by the bead polymerization or emulsion polymerization disclosed by Shigemori from a view point of polymerization mechanisms. Thus, a person skilled in the arts would not be capable of preparing core/shell-structured particles comprising a condensation-series thermoplastic resin as presently claimed based on the disclosure of Shigemori without undue experimentation. Therefore, the above specific particle of the present invention is clearly different and would not be obtained from the teachings of Shigemori.

That is, since Shigemori et al prepare a particle substantially by a seed-polymerization, particles comprising a condensation-series thermoplastic resin would never be obtained by Shigemori et al.

Contrarily, according to the present invention, since a specific combination of hydrophobic and hydrophilic polymers having a specific affinity relative to a water-soluble auxiliary component (B) is used for a particle preparation, particles having a core-shell structure can be efficiently obtained even if a condensation-series thermoplastic resin is used. Moreover, the particles have a smooth surface and a spherical shape. Such advantages would never be predicted from Shigemori et al.

Based on the foregoing, significant patentable distinctions exist between the present invention and the teachings of Shigemori et al. As such, withdrawal of the rejection is respectfully requested.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Conclusion

In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M. Dahlen, Ph.D., Esq., Reg. No. 43,575 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

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Amendment dated December 27, 2007
First Preliminary Amendment submitted with RCE

Docket No.: 2224-0260PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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